

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

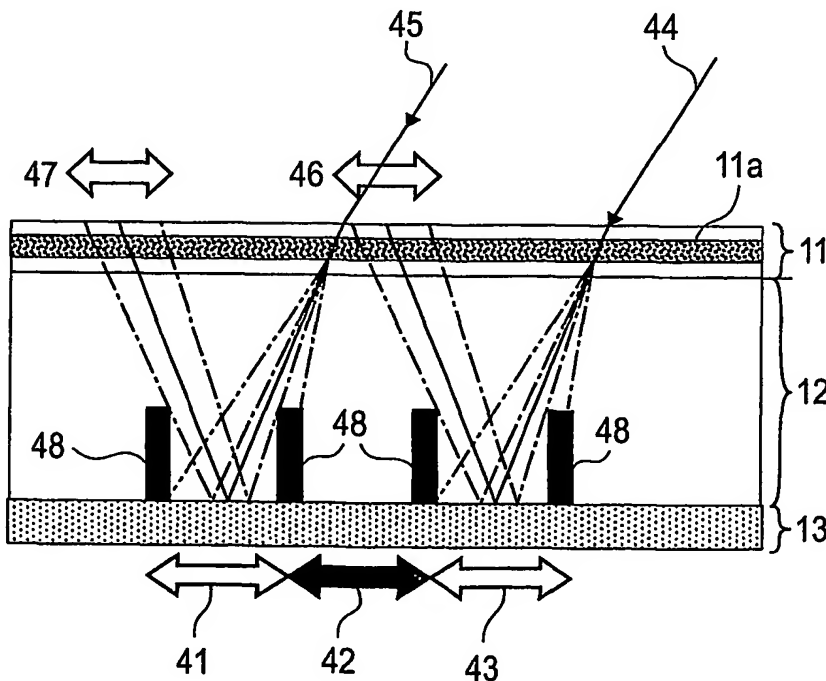
PCT

(10) International Publication Number
WO 2005/012987 A1

- (51) International Patent Classification⁷: G02F 1/1335, 1/167
- (21) International Application Number: PCT/JP2004/011310
- (22) International Filing Date: 30 July 2004 (30.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2003-285441 1 August 2003 (01.08.2003) JP
- (71) Applicant (for all designated States except US): CANON KABUSHIKI KAISHA [JP/JP]; 30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501 (JP).
- (72) Inventor; and
(75) Inventor/Applicant (for US only): ASAO, Yasufumi [JP/JP]; 1192-15, Onna, Atsugi-shi, Kanagawa 243-0032 (JP).
- (74) Agent: YAMADA, Ryuichi; TOKO International Patent Office, Hasegawa Building 4F, 7-7, Toranomon 3-chome, Minato-ku, Tokyo 105-0001 (JP).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: REFLECTIVE DISPLAY DEVICE



(57) Abstract: A reflection type display apparatus includes a pair of substrates disposed opposite to each other. On the one of the substrates, a scattering plate (11) having a property of scattering an incident light toward its propagation direction is disposed, and on the other substrate a reflector (13) and a plurality of pixels (41, 42, 43) are formed. Furthermore, a light absorption or reflection structure (48) having a projection-like or a wall-like shape is disposed on said other substrate at least a portion of a periphery of unit each of said plurality of pixels. The reflection type display apparatus having such a structure provides a bright image without impairing clarity of the image.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.